ABSTRACT

[00101]   Methods and systems for determining paths for flows within a multi-stage network made up of clusters of processing nodes. The flow paths may be determined without knowledge of whether or not packets of a particular flow will actually traverse specific ones of the clusters within the multi-stage network. In various implementations, the nodes of the multi-stage network may be coupled to one or more physical network switches through respective physical interfaces and a virtual connectivity grid superimposed thereon and configured through the use of a flow routing framework and system management framework to group the nodes into a number of clusters. The nodes of each cluster are configured to perform similar packet processing functions and the clusters are interconnected through virtual networks to which the nodes are communicatively coupled via virtual interfaces overlaid on top of the physical network interfaces.